

Shannon Road-Rillito Creek/ El Camino del Cerro

Water Quality Assurance Revolving Fund (WQARF) Site Tucson, Arizona

Community Involvement Plan



Shannon Road-Rillito Creek/El Camino del Cerro Monitoring Well Installation

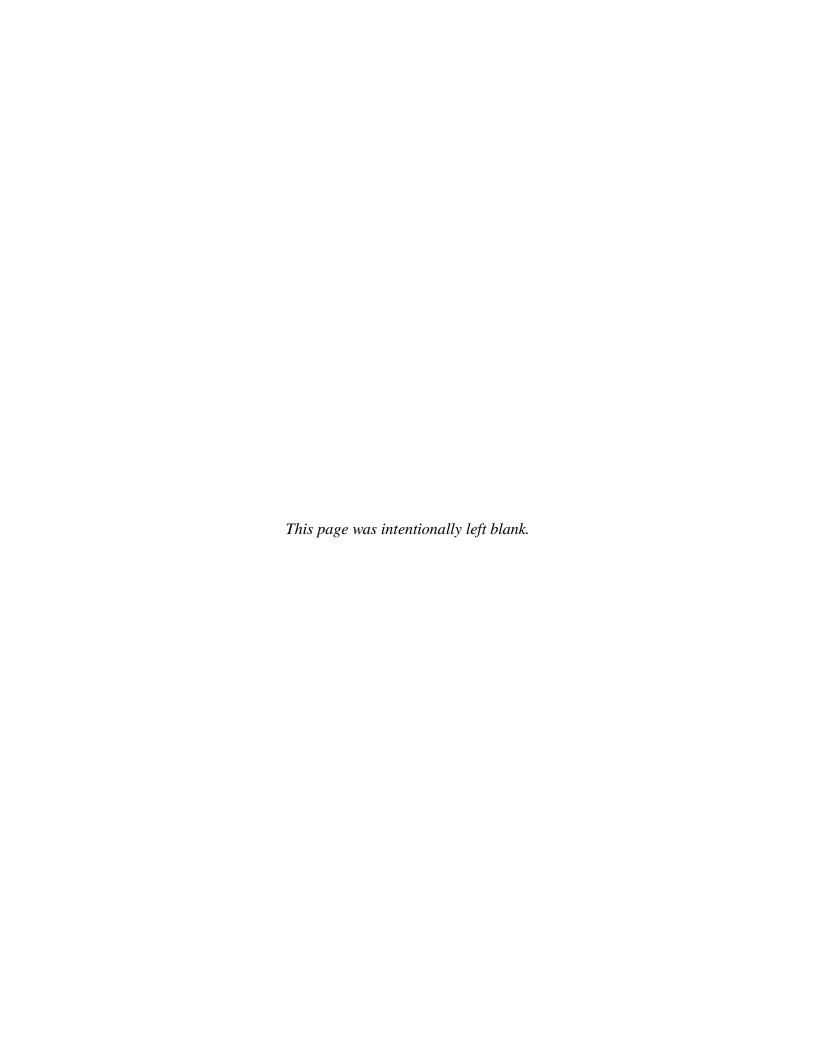
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Acronyms and Glossary of Terms

Disclaimer: All telephone numbers, email addresses, and contact names are subject to change after the date of this publication. The statistical data provided in the community demographics section is approximated based on information provided by the 2010 U.S. Census.





Community Involvement Plan – Introduction

The Arizona Department of Environmental Quality (ADEQ) is committed to involving citizens in the cleanup of contaminated sites in Arizona per the Water Quality Assurance Revolving Fund (WQARF) program. Created under the Environmental Quality Act of 1986 to support hazardous substance cleanup efforts in the state, WQARF is dependent upon legislative appropriations, cost recovery from responsible parties, corporate income taxes, and special fees for its funding.

The WQARF program identifies sites that are most in need of cleanup and adds them to the WQARF Registry. Sites on the WQARF Registry receive primary consideration for the distribution of funds for investigation and cleanup. WQARF Registry sites are assigned a numeric score based on several factors including the types of contaminants present, the location of the contaminants, and the number of people who may be affected by the contaminants. These scores are used to help determine relative risk at the site and do not necessarily mean that there is a direct risk to humans or the environment.

The El Camino del Cerro site, located in northwest Tucson, Arizona, was placed on the WQARF Registry in August 1998 with a score of 71 out of a possible 120. In April 1999, the Shannon Road-Rillito Creek site, also located in northwest Tucson, Arizona, was placed on the WQARF Registry with a score of 53 out of a possible 120. In the fall of 2004, the two sites were combined into the Shannon Road-Rillito Creek/El Camino del Cerro WQARF site.

Arizona Revised Statutes (A.R.S.) § 49-287.03(B) and § 49-289.03, as well as Arizona Administrative Code (A.A.C.) R18-16-404, specify that a community involvement plan (CIP) be developed for each site before beginning the Remedial Investigation. The purpose of the CIP is to provide a meaningful process for two-way communication between ADEQ and the public in order to keep the community informed about the progress of the site investigation and remediation. The CIP will accomplish this goal using the following steps:

- 1. Ensure public access to project information in a timely manner;
- 2. Identify a community involvement area and opportunities for community members and other stakeholders to participate in the decision-making process associated with the environmental investigation and remediation of the site;
- 3. Establish a Community Advisory Board (CAB);
- 4. Designate an ADEQ spokesperson; and
- 5. Develop a plan for distributing site information to residents within the site's community involvement area.

This CIP will describe ADEQ's role and public participation opportunities regarding the WQARF process. ADEQ community involvement staff will review and update this plan on a regular basis taking into consideration site-specific developments and public health and environmental impacts, as well as public comments and community concerns. ADEQ also will solicit and consider CAB input to this CIP.

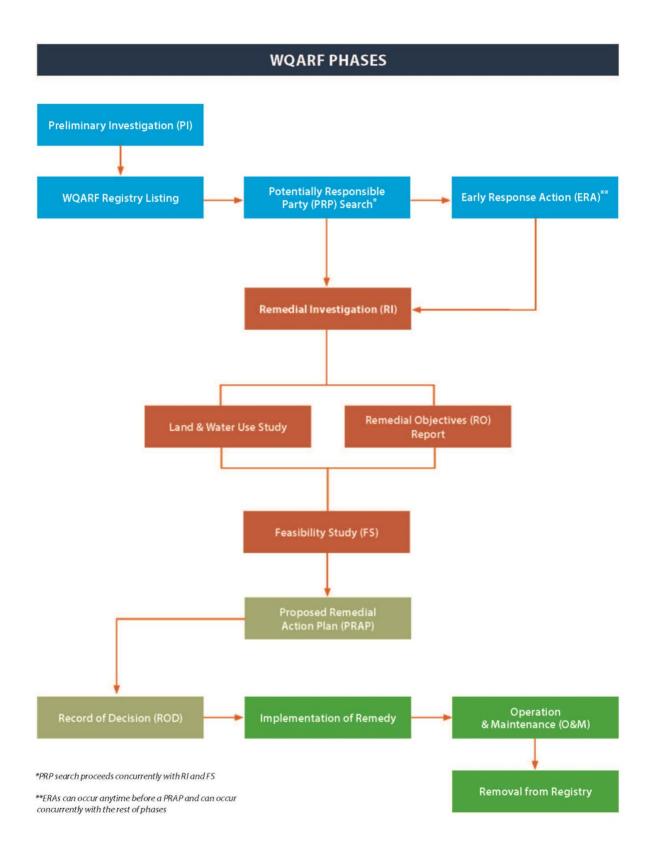


A. WQARF Process

The goal of the WQARF process is to clean up sites with groundwater and/or soil contamination as a means to ensure that human health and the environment are protected. The WQARF process uses a step-by-step approach to thoroughly investigate contaminated sites and determine the best method for achieving site cleanup. This process can take months, years, or in some cases, decades, to complete. Because each site is different, the WQARF process helps determine which cleanup method is best for a specific site.

For sites where the contamination has minimal impact to humans, cleanup may be achieved by restricting land or water use and allowing the contamination to dissipate naturally. For this method, regular monitoring of the groundwater or soil would occur to ensure that the contamination continues to decrease. For sites where the contamination may impact human health?, the cleanup method may involve restricting land or water use, actively treating or filtering the groundwater to remove contamination, digging up any contaminated soil and removing it from the area, bioremediation/other in situ methods, or a combination of these actions.

The following WQARF process flow chart depicts the different phases in the WQARF process, from the initial investigation of a site that is suspected of having contamination, to the implementation of the cleanup method (also known as the remedy), to finally the eventual removal of the site from the WQARF Registry upon satisfactory cleanup. Detailed definitions of each WQARF phase can be found in the glossary at the end of this CIP.





B. Designated Spokesperson

A designated spokesperson will inform the public of upcoming events, ensure that the CIP is implemented according to schedule, and act as liaison between ADEQ and the community. Additionally, , the spokesperson will determine methods for personal contact, arrange for the availability of a translator at meetings as needed, and coordinate the recording of presentations.. For further information regarding the Shannon Road-Rillito Creek/El Camino del Cerro WQARF site, please contact the designated spokesperson at the following:

Community Involvement Coordinator ADEQ

1110 West Washington Street, 4th Floor Phoenix, AZ 85007 (602) 771-4189 Or (800) 234-5677, Ext. 6027714189

Fax: (602) 771-4138 View Community Involvement Contacts Online:

http://www.azdeq.gov/function/about/waste.html#sps

C. Information Repository and Website

An information repository of existing public documents pertaining to the Shannon Road-Rillito Creek/El Camino del Cerro WQARF site is available for review both online and in person. Documents found in the repository include the WQARF Site Registry Report, Final Draft Remedial Investigation Report, and Proposed Remedial Objectives Report, as well as public notices and materials from CAB meetings. Technical documents relating to future milestones in the WQARF process will be made available to the public as they are completed. Interested parties can review site information by visiting the information repository online or in person as follows:

Online

https://azdeq.gov/environ/waste/sps/Shannon Road El Camino del Cerro.html

In Person

ADEQ Records Center 1110 West Washington Street Phoenix, AZ 85007 (602) 771-4380

Or

(800) 234-5677, Ext. 6027714380 (Please call to make an appointment.)

To make alternate arrangements to review documents in person at the location nearest you, contact the ADEQ Community Involvement Coordinator.

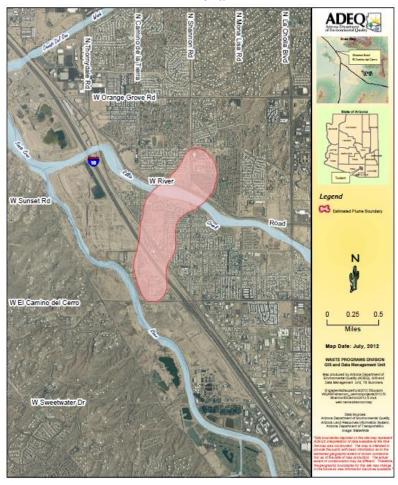


Chapter 1 – Site Overview

The Shannon Road-Rillito Creek/El Camino del Cerro WQARF site is located in a mixed residential and industrial area of northwest Tucson, Arizona. The El Camino del Cerro site was placed on the WQARF Registry in August 1998 with an eligibility and evaluation score of 71 out of a possible total of 120. The Shannon Road-Rillito Creek site was placed on the WQARF Registry in April 1999 with an eligibility and evaluation score of 53 out of a possible total of 120. The major factor leading to the site scores was the presence of volatile organic compounds in groundwater at levels exceeding Arizona Aquifer Water Quality Standards. In the fall of 2004, the El Camino del Cerro and Shannon Road-Rillito Creek WQARF sites were administratively combined into the Shannon Road-Rillito Creek/El Camino del Cerro WQARF site.

This site consists of the closed El Camino del Cerro Landfill and is bounded approximately by Orange Grove Road to the north, El Camino del Cerro Road to the south, Meadowbrook Park (north of the Rillito River) and Shannon Road (south of the Rillito River) to the east, and Camino de la Tierra and the Santa Cruz River to the west.

Shannon Road-Rillito Creek/El Camino del Cerro WQARF Site – Tucson, Arizona



The groundwater contaminants of concern at the site are tetrachloroethene (PCE), trichloroethene (TCE), 1,1-dichloroethene (1,1-DCE), vinyl chloride, and benzene. In addition, 1,1-dichloroethane (1,1-DCA) and *cis*-1,2-dichloroethene (*cis*-1,2-DCE) have been detected above Arizona Aquifer Water Quality Standards in groundwater. Lead was historically detected in soil samples at the former AMRI Oil property. However, the lead-contaminated soil was removed and backfilled with clean soil.

As of June 2013, the Metropolitan Domestic Water Improvement District (Metro Water) South Shannon Wellhead Granular Activated Carbon Treatment System had treated 1,337 million gallons of water and



South Shannon Well and Water Tank

removed approximately 272 total pounds, or 123.5 kilograms, of volatile organic compounds.

The Draft Final Remedial Investigation Report for the Shannon Road-Rillito Creek/El Camino del Cerro WQARF site was completed in March 2014. The 60-day public comment period on the document occurred from March 19 to May 17, 2014. A public meeting was held on May 8, 2014, to present the findings of the Remedial Investigation to the public and respond to verbal comments on the document. The Final Remedial Investigation Report was completed and noticed in April 2015 and missing data gaps were addressed in the Final Feasibility Study completed in July 2017.

For more detailed information about the history of the Shannon Road-Rillito Creek/El Camino del Cerro WQARF site, please refer to Appendix A (Site History) of this CIP.

Chapter 2 – Community Profile

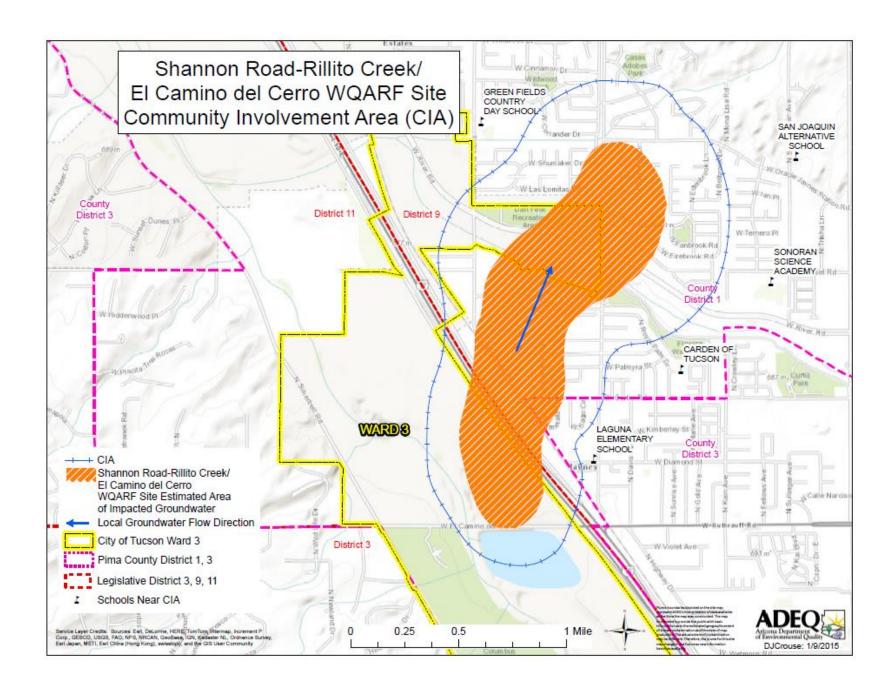
A. Community Involvement Area

ADEQ has established a community involvement area for each site per A.R.S. § 49-289.02(A) and (B). A community involvement area is established to designate a geographic area to which mass mailings will be delivered. Community involvement area boundaries are determined based on site-specific characteristics such as the affected media (i.e., soil, surface water, or groundwater), exposure routes, proximity to residential areas and public facilities, and level of community interest. The community involvement area may change as new information is received.

The map on the following page illustrates the community involvement area for the Shannon Road-Rillito Creek/El Camino Del Cerro WQARF site.







B. Community Demographics

In 2010, the population of Tucson, the second most populous city in Arizona, was 520,116 (as reported by the 2010 U.S. Census). The community involvement area boundary for the Shannon Road-Rillito Creek/El Camino del Cerro WQARF site encompasses four zip codes (85705, 85741, 85743, and 85745) and is estimated to contain approximately 71,658 households. The Shannon Road-Rillito Creek/El Camino del Cerro WQARF site is located within the boundaries of the City of Tucson and consists of a mixture of commercial businesses, light industrial businesses, warehouses, and residential neighborhoods.

According to the 2010 U.S. Census data, the total population for the zip codes encompassed by the community involvement area was 156,669, with an average household size of 2.47 persons. Residents of the area consisted of more homeowners (63.3%) than renters (36.7%). The median resident age is 36.6, which is older than the median age for Arizona residents as a whole (35.9).

As represented in the Population Groups graph that follows, the 2010 U.S. Census data demonstrates that residents in the Shannon Road-Rillito Creek/El Camino del Cerro WQARF site community involvement area identify themselves as approximately 75.2% White; 11.7% Some Other Race; 3.8% Two or More Races; 3.1% Black or African American; 3.0% Asian; 2.4% American Indian or Alaska Native; and 0.2% Native Hawaiian. According to the U.S. Census Bureau, people of Hispanic or Latino descent may be of any race. People identifying themselves as Hispanic or Latino within the Shannon Road-Rillito Creek/El Camino del Cerro WQARF site community involvement area comprised 34.6% of the population, which is higher than the 29.6% average Hispanic and Latino population for the state of Arizona. The higher-than-average Hispanic and Latino population may indicate the need for Spanish translation services, which ADEQ will take into consideration along with community feedback and state guidelines.

All percentages provided in the following Population Groups graph and the previous two paragraphs are median averages of the 2010 U.S. Census data for the zip codes within the Shannon Road-Rillito Creek/El Camino del Cerro WQARF site community involvement area.

Although U.S. Census data has been chosen as the primary grounds for establishing baseline community demographics, ADEQ is aware of the limitations of using this data. The data is only as accurate as the individuals that provided the information at the time at which the information was collected. ADEQ is aware that some populations may be inadequately represented by U.S. Census data and welcomes additional feedback from the community. In the case of the Shannon Road-Rillito Creek/El Camino del Cerro WQARF site, additional information was provided to ADEQ during a CAB meeting and is addressed in Chapter 3, Section B of this CIP.

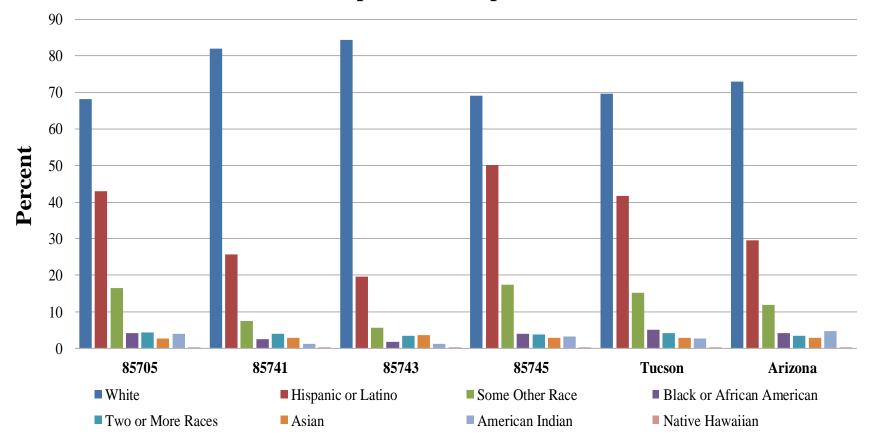
² Percentages are an average of the four zip codes and are rounded to the nearest tenth and thereby do not total 100 percent.



¹ Calculations are an average of the four zip codes.

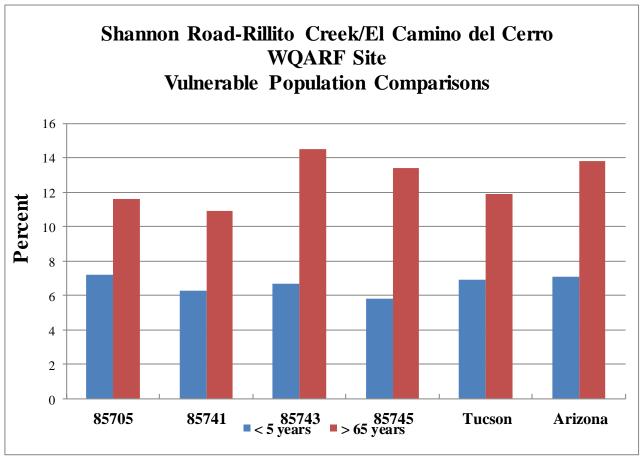
Arizona Department of Environmental Quality

Shannon Road-Rillito Creek/El Camino del Cerro WQARF Site Population Groups

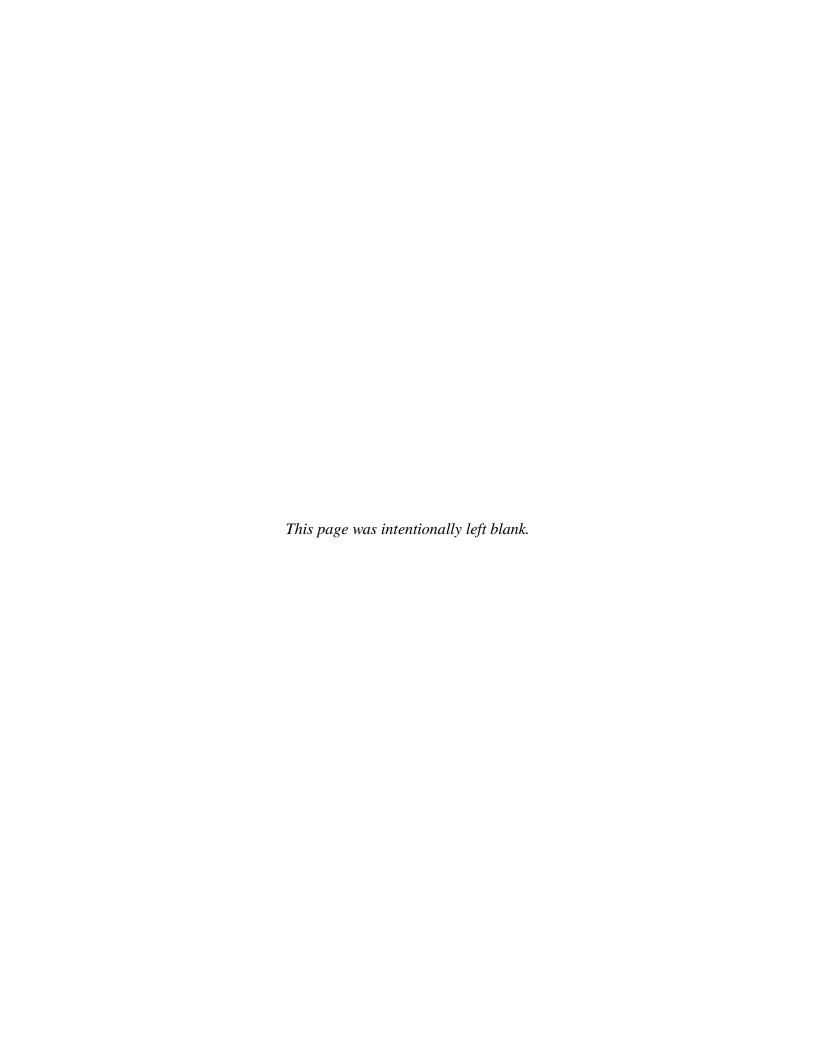


Note: Individuals identifying as Hispanic or Latino may be of any race and are already accounted for in the population percentages for the racial groups within each zip code, city, and state.

ADEQ also looks at the community as a whole with an emphasis on the percentage of people who are unusually sensitive to contaminants. These people are those who are under the age of 5 or over the age of 65, as well as those with health issues. The Vulnerable Population Comparisons graph that follows is based on 2010 U.S. Census data and presents the percentages of age-sensitive populations within the Shannon Road-Rillito Creek/El Camino del Cerro WQARF site community involvement area..



For further information regarding the community involvement area, please refer to the listing of neighborhood associations, community schools, and vulnerable population centers in Appendix B, and local and state government officials in Appendix C.



Chapter 3 – Community Issues and Concerns

In order to better understand the community and its concerns, ADEQ conducted telephone interviews with community and CAB members who have lived or worked in the area surrounding the Shannon Road-Rillito Creek/El Camino del Cerro WQARF site. The CAB members are listed in Appendix D. The following is a summary of their common concerns involving the environment, health, and ADEQ outreach activities.

A. Environmental and Health Concerns

All of the interviewees knew that the Shannon Road-Rillito Creek and El Camino del Cerro sites were on the WQARF Registry and were combined into one site in 2004. The interviewees were familiar with the history of the Shannon Road-Rillito Creek/El Camino del Cerro WQARF site as well as the contaminants of concern. Most interviewees cited the landfill previously owned and operated by Pima County as the primary source of contamination, although some interviewees were concerned about other possible sources.

While interviewees were asked about environmental and health concerns, their primary focus centered on the following environmental questions:

- Have all of the potentially responsible parties/sources of contamination been found?
- Is the Draft Remedial Investigation report inclusive of all the pertinent information needed for the remedial decision-making process?
- What progress has been made toward cleanup goals at the site?
- What is the status of ADEQ's budget for cleanup?
- What is the status of the remedy for the 1,4-dioxane contamination?

B. Outreach and Other Concerns

Interviewees provided the following feedback and suggestions on current and future outreach pertaining to the Shannon Road-Rillito Creek/El Camino de Cerro WQARF site:

- All interviewees were frustrated that state budget issues had caused investigation and remediation activity to stop for a number of years. For the same reason, information updates also had ceased and interviewees noted that they felt uninformed. As work has resumed at the site, the communication efforts have improved.
- All interviewees noted that ADEQ's Southern Regional Office is very good about communicating information to the CAB members and local community, but noted that it is more difficult to get information or answers from ADEQ's headquarters in Phoenix. All interviewees desired better staffing levels at the Southern Regional Office to maintain the best level of communication.



- Information dissemination was best when a community involvement staff member was located in the ADEQ Southern Regional Office, according to one interviewee.
- One interviewee noted that previous project management technical meetings held by ADEQ were beneficial.
- All interviewees preferred email as the method of communication between ADEQ and the community and stated that it is how they received information about site activities.
- Some interviewees felt that public meetings were the best way to keep the general public informed.
- Suggestions for other methods of communication included:
 - o Newsletters (Metro Water), and
 - Local school district outreach.
- One interviewee noted that use of maps at CAB meetings could be improved. The size of
 the text and the colors used on the maps included in ADEQ PowerPoint presentations
 often make them difficult to read.
- All of those interviewed believed that community involvement in the Shannon Road-Rillito Creek/El Camino del Cerro WQARF site was hindered because work at the site was shut down for several years due to state budget issues. They stated that it has been difficult to engage people in the project again after the long period of inactivity.

On May 12, 2015, a CAB meeting was held and ADEQ received feedback on a draft version of the CIP. One CAB member noted that the demographics information presented in Chapter 3, Section B, of this CIP is broad and does not reflect individual communities within a zip code, particularly communities where there is limited participation in the U.S. Census process. The CAB member presented demographics information compiled for Laguna Elementary School (see following table) and noted the high percentage of Hispanic children in the school (approximately 66 percent) as well as the high percentage of children receiving subsidized meals (approximately 92 percent).

It was stated that Laguna Elementary School is located in an area with high poverty, illiteracy, drug activity, and drug-related crime. There is also a high concentration of illegal immigrants and single female heads of households who do not speak or read English. Additionally, it was noted that a higher number of rental units exist in this area than in the county as a whole. This information suggests that there may be more communication challenges with this part of the community involvement area than previously envisioned.

C. Response to Community Issues and Concerns

ADEQ uses the information gathered from community interviews, CAB and public meetings, and direct contact to ensure that future outreach activities and materials are able to address community questions and concerns as well as keep the community informed of WQARF site activities. Additionally, community feedback informs ADEQ outreach practices and allows the communication techniques noted in Chapter 4, Section B to be tailored to the specific needs of the community.



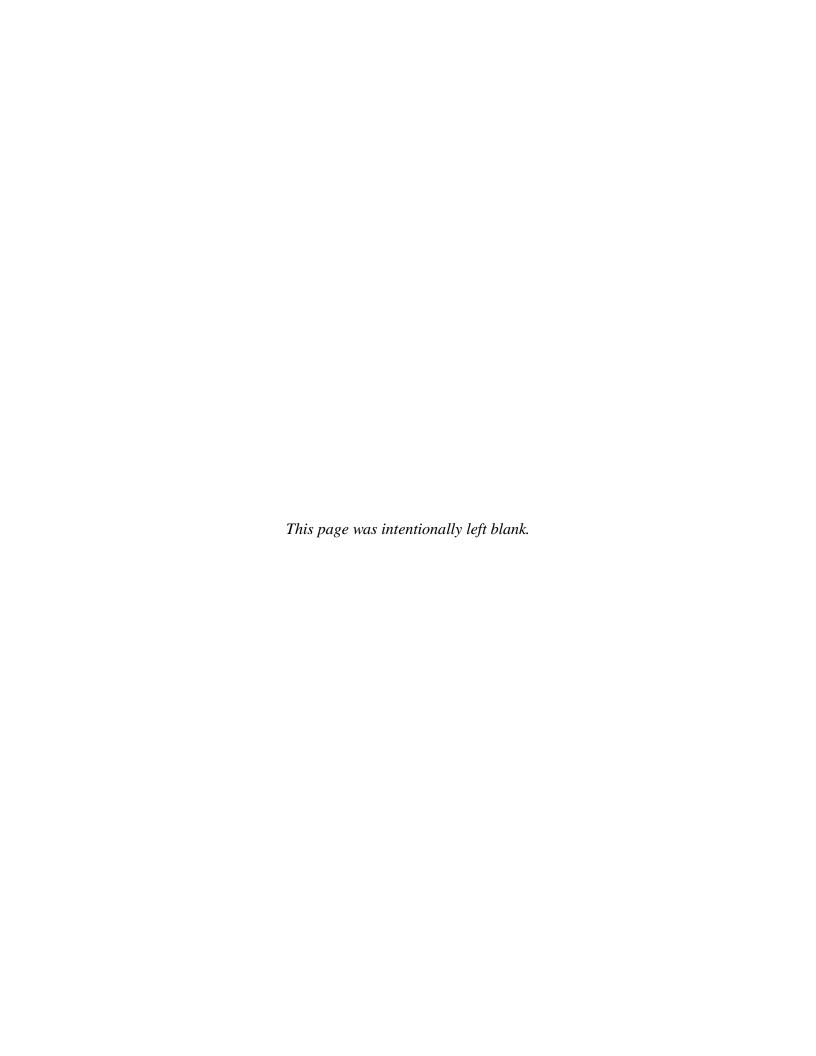
Laguna Elementary School Enrollment Demographics as of May 13, 2015

Grade Level	Number of Students	Asian	Black	Hispanic	American Indian	White	Free Lunch	Reduced Pay Lunch	Full Pay Lunch
KG	54	0	1	34	0	19	48	4	2
1	53	0	0	35	2	16	46	4	3
2	60	0	1	43	1	15	52	3	5
3	54	0	0	36	3	15	46	2	6
4	59	1	2	42	0	14	49	4	6
5	55	0	0	33	0	22	44	8	3
6	64	0	1	40	5	18	52	6	6
Total	399	1	5	263	11	119	337	31	31
Percentage		0.2506%	1.2531%	65.9148%	2.7569%	29.8246%	84.4612%	7.7694%	7.7694%

Notes:

^{1.} Demographic information provided by the Flowing Wells Unified School District superintendent.

^{2.} The percentages in this table are based on "Hispanic" being considered its own race, which is different from how the U.S. Census Bureau currently considers this category of people.

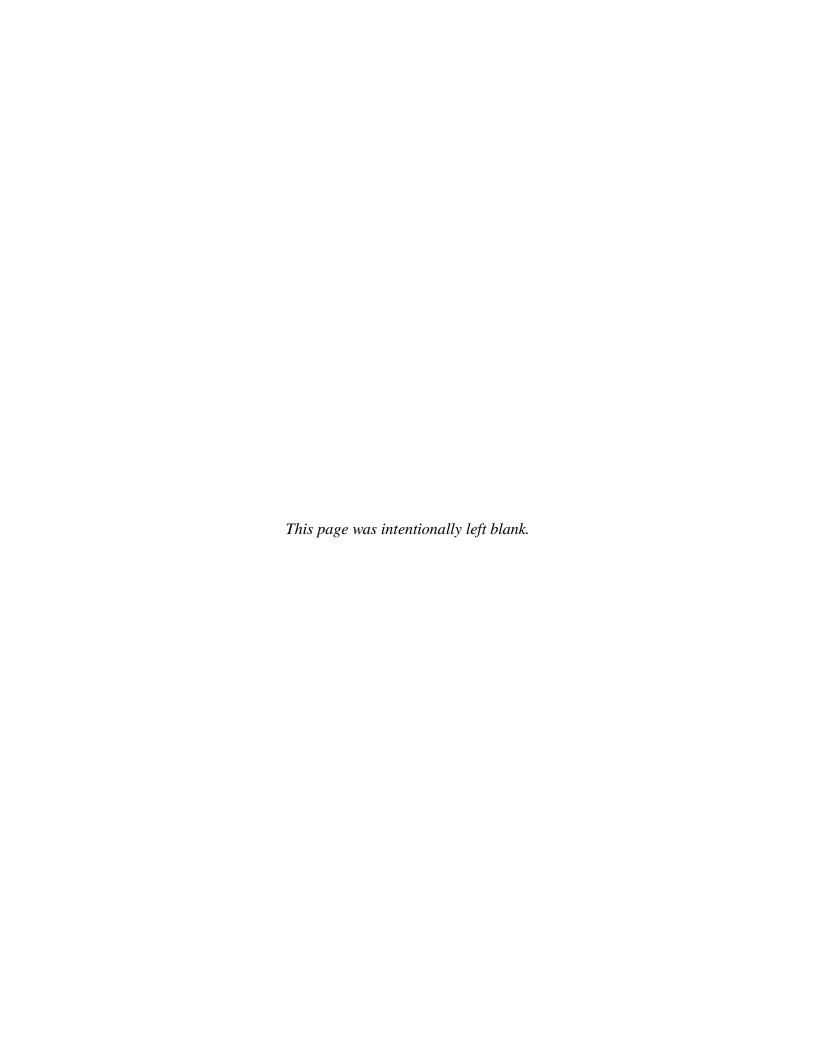


Chapter 4 – Community Involvement Action Plan

In addition to providing the framework for the state to investigate and clean up contaminated sites, the WQARF program also requires that ADEQ involve the community in the cleanup process. The following Community Involvement Action Summary table describes the required community involvement activities according to each WQARF phase and illustrates where the Shannon Road-Rillito Creek/El Camino del Cerro site is in the WQARF process at the time of this writing. This summary is followed by a description of the communications vehicles and techniques available for use. Multiple techniques to communicate with and educate the public may be used throughout the process of remediating the WQARF site.

A. Community Involvement Action Summary – Required Activities

The following Community Involvement Action Summary table describes the required community involvement actions for the Shannon Road-Rillito Creek/El Camino del Cerro WQARF site and notes what actions have been completed to date.



Community Involvement Action Summary

WQARF Phase	Mandated ADEQ Community Involvement Activity (See Chapter 4, Section B, for a detailed description of the applied communications	Statute (A.R.S) and Rule (A.A.C)	Activity to Date	Complete	
	techniques described herein.)			El Camino del Cerro	Shannon Road-Rillito Creek
Preliminary Investigation	Provide owners and operators a copy of the Draft WQARF Site Registry Report for a 15-day comment period prior to publishing a notice in a newspaper announcing the availability of the Draft WQARF Site Registry Report for a 30-day public comment period.	A.R.S. § 49-287.01(C) A.R.S. § 49-289.03(A)(1)	Mailing to owners and operators: -Shannon Road–Rillito Creek, July 2000 -El Camino del Cerro, July 2000 Public notice: -Shannon Road–Rillito Creek, March 1999 -El Camino del Cerro, March 1998	√	√
WQARF Registry Listing	 Following the listing of a site on the WQARF Registry, ADEQ will: Establish a preliminary community involvement area (see Chapter 2, Section A) within 90 days of site listing on the WQARF Registry. Provide written notice to the community on hazardous substance contamination in the area, the actual and potential risks and routes of exposure, possible health effects, and the opportunity to join the site mailing list. Identify ADEQ personnel to contact for further information. 	A.R.S. § 49-289.02	Notice to the community and development of a community involvement area, Summer 1999 and July 2000	✓	√
	Develop a CIP that establishes a CAB, designates a spokesperson, provides for newsletters with current information about the status of remedial actions at the site, establishes a public document repository location, and provides for schedules of CAB meetings and public meetings. Update the CIP at least every 2 years.	A.R.S. § 49-287.03(D) A.R.S. § 49-289.03(B) A.R.S. § 49-289.03(C) A.A.C. R18-16-404(C)(1)(i) A.A.C. R18-16-404(C)(1)(j) A.A.C. R18-16-404(C)(1)(k) A.A.C. R18-16-404(C)(1)(o)	Original CIP: -2000 Updated CIP: -2002, 2006, and 2015, 2018	√	✓



	Community Invol	vement Action Summary			
WQARF Phase	Mandated ADEQ Community Involvement Activity (See Chapter 4, Section B, for a detailed description of the applied communications	Statute (A.R.S) and Rule (A.A.C) References	Activity to Date	Complete	
	techniques described herein.)	Refer ences		El Camino del Cerro	Shannon Road-Rillito Creek
Early Response Action	A work plan shall be prepared for each Early Response Action that will include a description of work to be done, known site conditions, a plan for conducting the work; a description of community involvement activities for the Early Response Action under R18-16-404; and a schedule. Community involvement activities may include development of a community involvement plan under A.A.C. R18-16-404(C) or community involvement activities appropriate to the scope and schedule of the work performed such as a general public notice to those who may be impacted by field work as indicated in A.A.C. R18-16-404(D)(2). If immediate action is necessary to address a current risk to public health or the environment, to protect a source of water, or to provide a supply of water, the work plan and written rationale may be prepared and the community involvement activities may be conducted after commencement of the Early Response Action.	A.A.C. R18-16-405(D)(2) A.A.C. R18-16-405(E) A.A.C. R18-16-405(G)	Early Response Action Notices: -Fall 2001 Early Response Action Meetings: -1996 (regarding AMRI Oil/Wrecksperts property on Highway Drive) -September 25, 2001 (regarding E.C. Winter Oil property)	√	√
Remedial Investigation ³	Provide notice to interested parties announcing the availability of the Remedial Investigation Scope of Work or Work Plan, Fact Sheet, and CIP Outline for review and 30-day public comment period. Provide notice indicating that any person, by written agreement with ADEQ may develop and implement a work plan for the Remedial Investigation and Feasibility Study and solicit information regarding the current and future land and water uses at the site. These notices shall also provide an opportunity to request a public meeting.	A.R.S. § 49-287.03(B) A.R.S. § 49-287.03(C) A.A.C. R18-16-301(C) A.A.C. R18-16-403(F) A.A.C. R18-16-404(G) A.A.C. R18-16-404(C)(1)(a) A.A.C. R18-16-406(B) A.A.C. R18-16-406(D)	Notices: -Shannon Road–Rillito Creek, March 1999 -El Camino del Cerro, March 1998 Combined notices, July 2000	√	√
	Establish a selection committee to choose CAB members for the site. The selection committee shall consist of the following number of people from each organization: • ADEQ: 1 • Potentially Responsible Party: 1 • Local Official: 1 • Local Community: 2	A.R.S. § 49-289.03(D)	Selection committee, August 2000		√

³ A potentially responsible party search is conducted concurrently with the Remedial Investigation and Feasibility Study, but does not have mandated community involvement activities. ⁴ Data collected from land and water use studies will be incorporated into the Remedial Investigation and/or Remedial Objectives report per A.A.C. R18-16-406(D)-(I).



Community Involvement Action Summary

WQARF Phase	Mandated ADEQ Community Involvement Activity (See Chapter 4, Section B, for a detailed description of the applied communications techniques described herein.)	Statute (A.R.S) and Rule (A.A.C) References	Activity to Date	El Camino del Cerro	Shannon Road-Rillito
Remedial Investigation (continued)	Establish a CAB of between 5 to 20 members that represent a diversified cross section of the community. Within 90 days of appointment by the CAB selection committee, the CAB shall elect co-chairpersons and develop a charter defining operating procedures, membership terms and obligations, goals for developing issues, concerns and opportunities related to quick cleanup of the site, and any other anticipated activities for identifying and improving the public's access and understanding of information regarding the remediation process at the site.	A.R.S. § 49-289.03(C) A.R.S. § 49-289.03(E) A.R.S. § 49-289.03(F)	Joint CAB established, October 2000	,	Creek
	Publish a combined ⁵ public notice announcing the availability of the Draft Remedial Investigation Report for review and a minimum 30-day public comment period, as well as hold a public meeting to solicit Remedial Objectives for the site. The public meeting shall be held not less than 45 calendar days and not more than 90 calendar days after release of the Draft Remedial Investigation report, unless ADEQ sets a different date for good cause.	A.A.C. R18-16-301(C) A.A.C. R18-16-404(C)(1)(b) A.A.C. R18-16-406(F) A.A.C. R18-16-406(I)(1) A.A.C. R18-16-406(I)(2)	Public notice and comment period: -March 19, 2014 Public meeting: -May 8, 2014	,	(
	Publish a public notice announcing the availability of the Proposed Remedial Objectives Report for a 30-day public comment period. Publish a public notice of the availability of the Final Remedial Investigation Report, which shall contain the results of site characterization and the final Remedial Objectives Report. The final Remedial Investigation report shall be accompanied by responsiveness summaries regarding comments, issues and concerns raised in the community involvement process and, if the report is prepared by a person other than ADEQ, copies of the comments received.	A.A.C. R18-16-301(C) A.A.C. R18-16-404(C)(1)(c) A.A.C. R18-16-406(I)(5) A.A.C. R18-16-406(J)	Proposed Remedial Objectives Report public notice/comment period: -May 12, 2014 Final Remedial Investigation Report public notice: - April 20, 2015		
Feasibility Study	Provide notice to interested parties announcing the availability of the Feasibility Study Work Plan* Although not mandated, ADEQ will also provide public notice upon completion of the Feasibility Study.	A.A.C. R18-16-404(C)(1)(d) A.A.C. R18-16-407(B)	Final Feasibility Study -July 2017		
Proposed Remedial Action Plan	Publish a public notice announcing the availability of the Proposed Remedial Action Plan for a 30-day public comment period. Mail the same notice to interested parties. The notice will describe the proposed remedy and its estimated cost and identify where the Proposed Remedial Action Plan, Remedial Investigation, and Feasibility Study Reports may be inspected.	A.R.S. § 49-287.04(B) A.R.S. § 49-289.03(A)(2) A.A.C. R18-16-301(C) A.A.C. R18-16-404(C)(1)(e) A.A.C. R18-16-408(A)			

⁵If not combined, separate public notices will be provided for the Draft Remedial Investigation comment period and the Remedial Objectives solicitation and public meeting.



Community Involvement Action Summary

WQARF Phase	Mandated ADEQ Community Involvement Activity (See Chapter 4, Section B, for a detailed description of the applied communications techniques described herein.)	Statute (A.R.S) and Rule (A.A.C) References	Activity to Date	Com El Camino del Cerro	Shannon Road-Rillito Creek
Record of Decision	Publish a public notice announcing the availability of the Record of Decision and Responsiveness Summary for review.	A.R.S. § 49-287.04(G) A.A.C. R18-16-404(C)(1)(f) A.A.C. R18-16-410			
Implementation of Remedy (Remedial	Publish a public notice announcing a request for ADEQ to approve remedial actions at the site. The notice will provide the opportunity for a 30-day public comment period.	A.A.C. R18-16-301(C) A.A.C. R18-16-404(C)(1)(h) A.A.C. R18-16-413			
Actions)	Provide notice to the public and interested parties of a request for ADEQ to waive a regulatory requirement (permit) to complete remedial actions.	A.R.S. § 49-290 A.A.C. R18-16-404(C)(1)(l)			
Implementation of Remedy	Provide notice to the public that fieldwork conducted to remove contaminants of concern may result in noise, light, odor, dust or other adverse impacts.	A.A.C. R18-16-404(C)(1)(m)	ADEQ has/will continue to provide notice to residents regarding field work and well installation.	v	/
(Remedial Actions) (continued)	Provide notice to the public of a request for ADEQ to determine whether each of the Remedial Objectives for a site have been satisfied and will continue to be satisfied. The notice will provide the opportunity for a 30-day public comment period on the request.	A.A.C. R18-16-301(C) A.A.C. R18-16-404(C)(1)(n) A.A.C. R18-16-416(B)			
Operation & Maintenance	Publish a public notice announcing the availability of the Operation & Maintenance Plan for review and a 30-day public comment period. Mail the same notice to interested parties.	A.A.C. R18-16-301(C) A.A.C. R18-16-404(C)(1)(g) A.A.C. R18-16-411(E)			
Removal from Registry	Although not mandated by Arizona statute or administrative code, ADEQ may publish a public notice upon the removal of the site from the WQARF Registry.	Not applicable			
Any Phase	Publish a public notice announcing a request to ADEQ for a prospective purchaser agreement. The notice will provide the opportunity for a 30-day public comment period.	A.R.S. § 49-289.03(A)(3) A.A.C. R18-16-301(C)	No prospective purchaser agreement requests have been submitted to date.	•	/
	Publish a public notice announcing the intention of ADEQ to enter into a settlement agreement with a responsible party. The notice will provide the opportunity for a 30-day public comment period.	A.R.S. § 49-289.03(A)(4) A.A.C. R18-16-301(C)	No settlement agreement requests have been submitted to date.	٧	/



B. Community Involvement Action Summary – Communication Techniques

As previously described in the Community Involvement Action Summary table, there are required communications activities for every phase of the WQARF process. This section describes the specific activities and resources that ADEQ uses and has available to communicate with, educate, and help the community and stakeholders become actively involved in the Shannon Road-Rillito Creek/El Camino del Cerro WQARF site.

ADEQ will continue to use the following resources to keep stakeholders informed throughout the process:

- 1. CAB The CAB has been conducting public meetings about the Shannon Road-Rillito Creek/El Camino del Cerro WQARF site with ADEQ's assistance since October 2000. CAB members advise ADEQ on appropriate means of delivering site information and provide input regarding content. CAB members also serve as an information resource for their community. CAB meetings are held at a location and date mutually agreed upon by the CAB members and an ADEQ representative. Care is taken to ensure that the location is easily accessible by the public. For a list of current CAB members, see Appendix D.
- **2.** Local Print Media ADEQ will publish all WQARF milestone public notices in *The Daily Territorial*, which has a search function for public notices (http://dailyterritorial.com). For a list of other media outlets, see Appendix E.
- 3. U.S. Mail and Email Lists ADEQ maintains U.S. Mail and email address lists for the Shannon Road-Rillito Creek/El Camino del Cerro WQARF site. Mailing list addresses are compiled and updated on an ongoing basis through CIP updates, as are return mailers from fact sheets, CABs, open houses, public meeting attendance lists; and other individual requests. These distribution lists include CAB members, local elected and appointed officials, neighborhood and homeowner association contacts, schools and vulnerable population centers representing/located within the site community involvement area (see Appendices B through D), as well as other interested parties.
- **4. ADEQ Website** ADEQ's website provides visitors with three areas of information related to the site and is updated on an ongoing basis:
 - Calendar Page This calendar provides information regarding public meetings (including CAB meetings), notices, and public comment periods (http://www.azdeq.gov/cgi-bin/vertical.pl).
 - CAB Meeting Page This page provides links to announcements, agendas, and minutes of CAB meetings (http://www.azdeq.gov/environ/waste/sps/reg.html).
 - Site Information Page This page provides detailed site information and access to the online information repository for the site, which includes milestone documents (https://azdeq.gov/environ/waste/sps/Shannon Road El Camino del Cerro.html).



- **5. ADEQ Notice Boards** Notice boards are located in ADEQ's Phoenix and Tucson offices.
- **6. Public Meetings** Public meetings or open houses, beyond the CAB meetings, may be scheduled and conducted as needed and as determined by ADEQ and the CAB (for example, meetings with neighborhood/homeowners associations, schools, or other community groups).
- **7. Site Tours** Tours of the site can be requested and arranged in conjunction with the property owners and in compliance with current laws and regulations by contacting the ADEQ Community Involvement Coordinator.

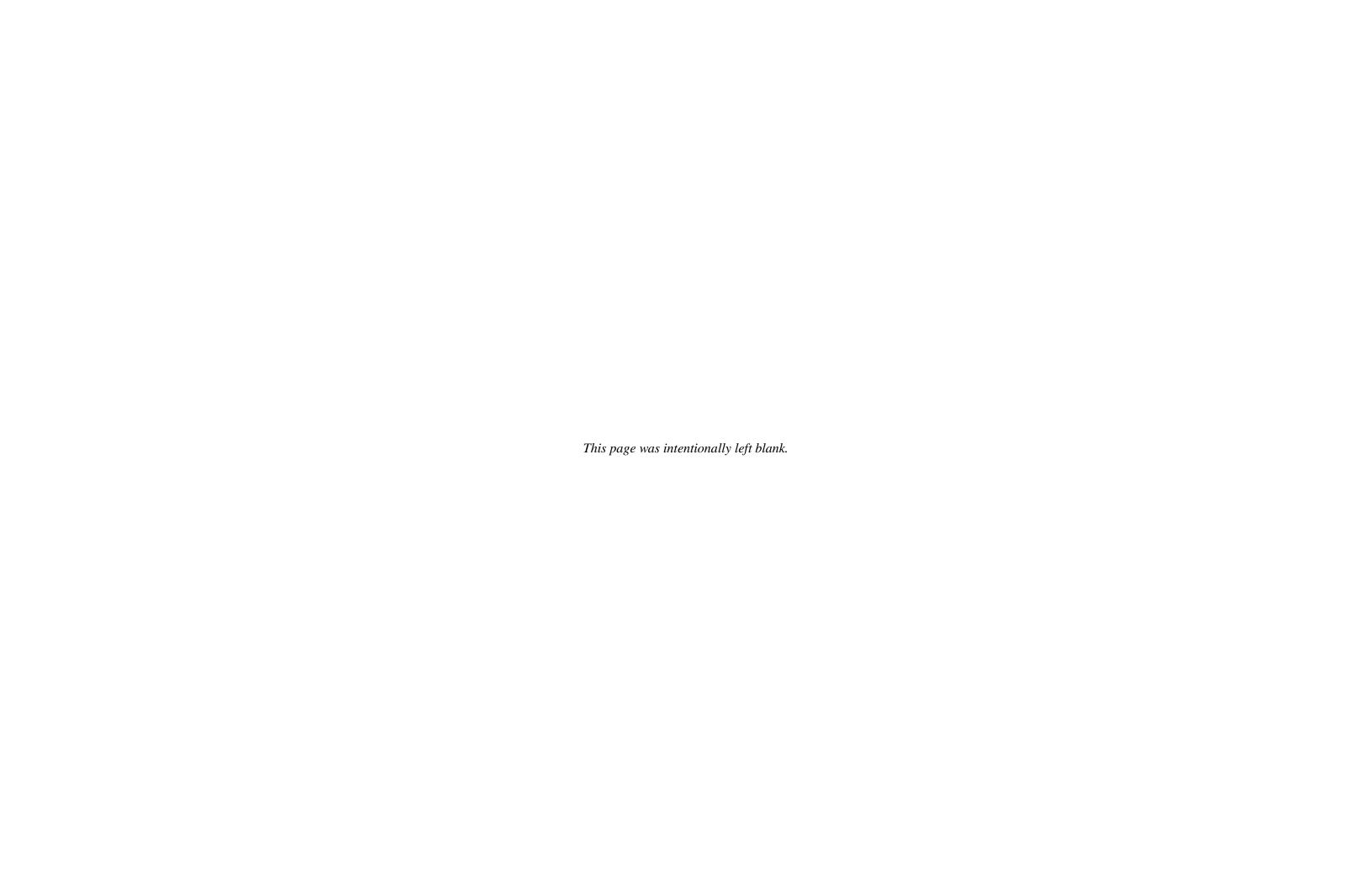
The following table of Communication Techniques illustrates how these techniques have, and will be used throughout the WQARF process for the Shannon Road-Rillito Creek/El Camino del Cerro WQARF site.



	Communication Techniques								
	Communications Recipients/Methods								
Type ⁶	Why	When	CAB Members	Interested Parties List	ADEQ Website	Local Print Media	ADEQ Notice Board		
Notice	Provide notice of availability of milestone documents, request comments, and solicit input.	Per mandate (see Community Involvement Action Summary table).	✓	√	✓ (Site and calendar pages)	✓ (The Daily Territorial)	✓		
CAB Meeting Notice/Agenda	Provide two-way communication about the status of site activities. The notice announces the meeting and provides the agenda.	Variable schedule based on level of site activity as scheduled by CAB and ADEQ, with the exception of the required public meeting for the solicitation of remedial objectives (see Community Involvement Action Summary table).	√	√	(Site, calendar, and CAB meetings pages)	Not applicable	✓		
Technical Presentation	Provide current information about site activity or related topics.	At CAB meetings or at specially requested public meetings.	✓	Not applicable	(Site and CAB meetings pages)	Not applicable	Not applicable		
Technical Milestone Document	Provide current technical information about site investigation/remediation activities (e.g., Remedial Investigation, Feasibility Study, etc.).	According to the WQARF Process as documents are developed and become available.	√	Not applicable	✓ (Online information repository)	Not applicable	Not applicable		
Site Fact Sheet/Newsletter	Provide current information about site activity.	Published at the start of the Remedial Investigation and at specific milestones or other times as deemed appropriate by ADEQ and the CAB.	√	~	(Online information repository)	Not applicable	Not applicable		
Public Meeting	Provide forum to solicit Remedial Objectives. (Note that this meeting may be conducted in conjunction with a CAB meeting.) Additional public meetings may be used to discuss site activities as determined by level of community interest.	As required/if requested.	✓	✓	✓ (Site and calendar pages)	✓ (The Daily Territorial)	✓		
Site Tour	Provide walking or driving tour of the site to observe current site conditions and the surrounding community and environment.	If requested, and with cooperation of current property owners.		Contact Al	DEQ Community Involveme	ent Coordinator.			



⁶ Communications deliverables may be translated into Spanish if deemed necessary or requested.

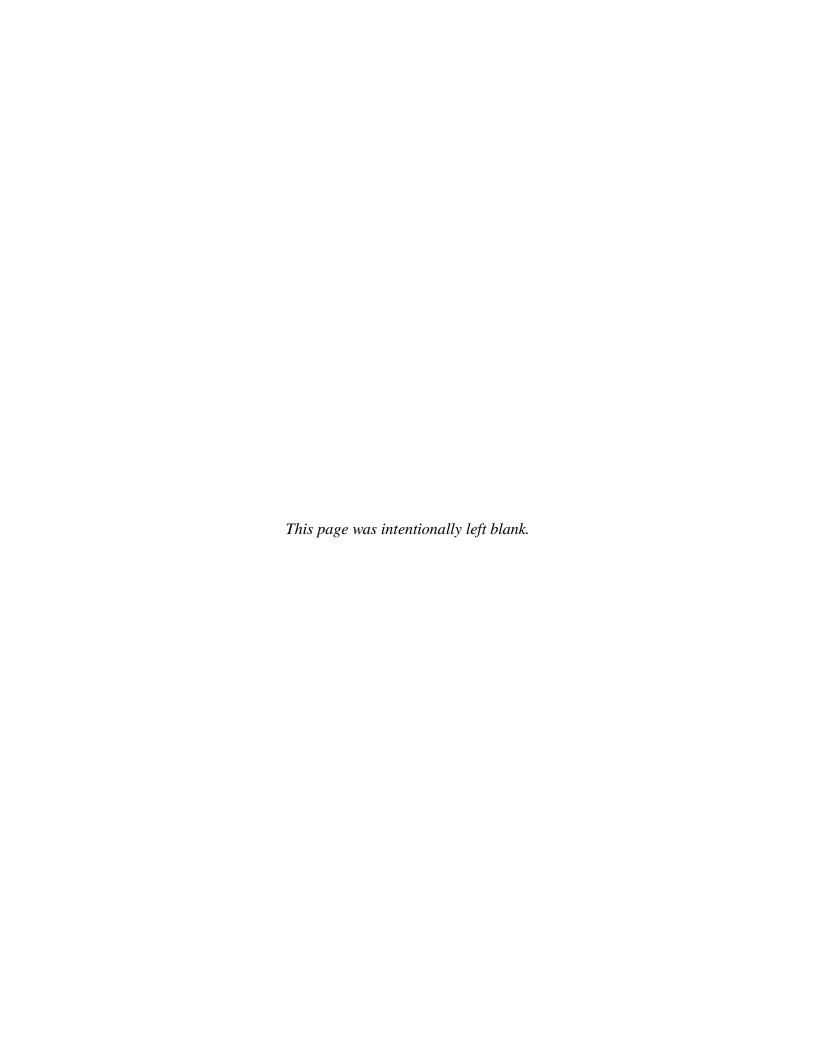


C. Other Resources and Contacts

In addition to the designated spokesperson and information repository identified at the beginning of this CIP, the appendices included in this CIP provide additional resources and contact information for the public to use as desired.

- **Appendix A** provides a history of major activities by year at the Shannon Road-Rillito Creek/El Camino del Cerro WQARF site.
- Appendix B provides a list of targeted communities in the Shannon Road-Rillito Creek/El Camino del Cerro WQARF site community involvement area. These include neighborhood associations registered with the City of Tucson Neighborhood Association, as well as community schools and vulnerable population centers that fall within the community involvement area.
- **Appendix C** provides a table of local and state elected officials, by ward or district, who represent communities within the community involvement area. Note that some wards or districts may encompass more of the community involvement area than others.
- **Appendix D** provides a table of current Shannon Road-Rillito Creek/El Camino del Cerro WQARF site CAB members.
- **Appendix E** provides a list of media outlets in the area. All future public notices for the Shannon Road-Rillito Creek/El Camino del Cerro WQARF site can be found by searching *The Daily Territorial* publication (http://dailyterritorial.com).
- Appendix F provides a list of other related state and local agencies that may be of interest to the public.





Appendix A – Site History

The following presents a site history in chronological order for the Arizona Department of Environmental Quality (ADEQ) Shannon Road-Rillito Creek/El Camino del Cerro Water Quality Assurance Revolving Fund (WQARF) site.

1950s–1974 The E.C. Winter Oil property was a used oil recycling facility from the 1950s until 1974. The property has been a mixed use (industrial/commercial/residential) property since the cessation of the E.C. Winter Oil operation.

1993 Volatile organic compounds (VOCs) were detected in the City of Tucson Z-006A water supply well, and this well was taken out of the Tucson water distribution system. This well is currently used as a monitoring well.

1994 VOCs were detected in the Metropolitan Domestic Water Improvement District (Metro Water) South Shannon Well and in the Acacia Gardens Mobile Home Park Water Supply Well. Metro Water designated the South Shannon Well as



Excavation Conducted at the Former E.C. Winter Oil Property

a backup well, and the water drawn from it was blended with the water from two other wells prior to distribution.

In June 1995, the Pima County Health Department tested residents on the Arizona Wrecksperts property, formerly the AMRI Oil facility, for lead. The children on site had elevated blood lead levels, and the residents moved off the site until April 1996. From February to April 1996, ADEQ's Site Assessment Unit conducted an initial investigation and a soil removal action at the Arizona Wrecksperts/AMRI Oil property, after a black, tar-like substance was found on the property. Soil contaminated by lead and waste oil was removed and replaced with clean backfill. Additional investigations were conducted to monitor the lead levels of residents and to determine if the contamination had impacted groundwater.

In 1995, Acacia Gardens Mobile Home Park was connected to Tucson Water. In 1997, the owners of Acacia Gardens installed a wellhead treatment system for their well and operated their system until December 2000.

In September 1996, Pima County began the operation of a pilot landfill gas mitigation system flare. This system utilized a series of gas extraction wells that removed landfill gases from the El Camino del Cerro Landfill to a flare where they were burned off.

In May 1997, ADEQ completed the installation of five soil vapor monitoring wells in the area of the El Camino del Cerro Landfill. In June 1997, Metro Water completed the installation of a wellhead treatment system for the South Shannon Well.

In December 1997, Pima County completed the El Camino del Cerro Study Area Landfill and Groundwater Operable Unit Feasibility Study reports. Addendums to the reports were issued by Pima County in 1999. Subsequent landfill cleanup utilized vapor extraction wells, and the extracted gas was piped to a biomass filter. Between 20 and 40 pounds of VOCs were removed each week when this system was operating. The system eventually reached a state of ineffective mass removal, and Pima County shut down the system to let the landfill soil gas return to equilibrium.

The El Camino del Cerro site was placed on the WQARF Registry in August 1998 with a score of 71 out of a possible 120. In April 1999, the Shannon Road-Rillito Creek site was placed on the WQARF Registry with a score of 53 out of a possible 120.

2001

In February, lead-contaminated soil was found in the southeast corner of the Western Trailer Park property, formerly part of the AMRI Oil property. The lot was unoccupied, so there was no risk to residents. Additional soil and groundwater tests were conducted to further determine the extent of the contamination and any potential risks that it might pose.

A site investigation of the former E.C. Winter Oil property was completed and an engineering evaluation/cost analysis was issued in June. In the fall, ADEQ excavated surface and near-surface contaminated soil for disposal in a permitted landfill. Also, the Acacia Gardens Well was abandoned. Currently the City of Tucson is supplying water to the mobile home park.

2004-2006

Remedial Investigations were conducted by Pima County in the vicinity of the El Camino del Cerro Landfill and northeast of Interstate 10. The Remedial Investigations included characterization of the nature and extent of groundwater contamination, evaluation of aquifer characteristics near the landfill, and characterization of the composition of



Upgrading the Treatment System at the South Shannon Well

the landfill gas. Available data showed that there was a single plume and, as a result, the El Camino del Cerro and Shannon Road-Rillito Creek WQARF sites were combined into the existing Shannon Road-Rillito Creek/El Camino del Cerro WQARF site in the fall of 2004.

An ADEO study to determine the vertical extent of the groundwater contamination within contaminated wells at the site was conducted. The data gathered was used to develop future monitoring well designs.

An extensive passive soil gas survey was conducted south of Rillito Creek along the east sides of Interstate 10 to screen for potential sources of the groundwater contamination. The survey did not indicate that a significant source for the groundwater contamination exists in this area. Additional active soil vapor investigations were completed at the former E.C. Winter Oil and Arizona Wrecksperts/AMRI Oil properties because these properties had the highest passive soil gas results. The data gathered from these investigations was analyzed to determine the significance of these potential source areas and any risks that they might pose. In June 2006, a soil vapor extraction (SVE) system was installed at the former E.C. Winter Oil property and began removing VOCs in the soil. The system was expected to operate for 1 to 2 years, alternating on and off for 6month periods.

The effectiveness of the treatment system at Metro Water's South Shannon Well was diminishing as VOC concentrations increased in the well water. A Feasibility Study(FS) for upgrading the system was performed. The treatment system was shut down from April 2004 through June 2006 and upgraded with two large granular activated carbon (GAC) filters. Five additional groundwater monitoring wells were installed in winter 2006 to further evaluate the groundwater on the Arizona Wrecksperts/AMRI Oil property.

2007

Five new monitoring wells were installed at the WQARF site in the early summer. A soil removal action was completed at the former Arizona Wrecksperts/AMRI Oil property in the spring and summer. A total of 1,600 tons of lead-contaminated soil were removed from the eastern portion of the former Arizona Wrecksperts/AMRI Oil and Western Trailer Park properties. In addition, a number of soil samples were collected from the western portion of the former Arizona Wrecksperts/AMRI Oil property, the portion that previously had contained waste oil pits, to complete a human health risk assessment. This risk assessment indicated that no unacceptable risk was associated with the soils at the former Arizona Wrecksperts/AMRI Oil property.

2008

Four additional monitoring wells were installed in January. These wells were designed to more fully define the extent of contamination and to replace some wells that had gone dry. Three of the new monitoring wells also served as "sentinel" wells for monitoring possible containment migration toward Metro Water wells. Data gathered from these new wells was used to complete a Remedial Investigation Report for the site. Also in January, ADEQ discontinued operation of the SVE system at the former E.C. Winter Oil property because of declining extraction rates.

- On June 30 the Pima County Solid Waste Division began operation of a shallow tray air stripper treatment system at the former El Camino del Cerro Landfill. The pump and treat system was expected to remove the bulk of the continuing source of groundwater contamination. By the end of September the treatment system had removed approximately 14.9 pounds of VOCs.
- Metro Water continued to operate the GAC treatment system at the South Shannon Well, and the Pima County Solid Waste Division continued to operate the shallow tray air stripper treatment system at the former El Camino del Cerro Landfill. By the end of 2010 Metro Water had pumped 851 million gallons of water and removed approximately 174.5 pounds or 79.2 kilograms of VOCs. Also by the end of the year, Pima County had pumped 124 million gallons of water and removed 36.5 pounds or 16.6 kilograms of VOCs.
- By September, the extraction well at the former El Camino del Cerro Landfill had been shut down because of scaling problems. The treatment system had pumped 11 million gallons of water and removed approximately 37.5 pounds or 16.6 kilograms of VOCs.
- The extraction well for the shallow tray air stripper treatment system at the former El Camino del Cerro Landfill was replaced with a new extraction well located closer to the landfill.
- The Metro Water GAC treatment system continued to treat water at the South Shannon Road well. By the end of June, 35.8 million gallons of water had been treated, with 8.62 pounds of VOCs removed. The new extraction well at the former El Camino del Cerro Landfill remained inoperable for much of the year because of electrical problems.
- The Draft Final Remedial Investigation Report for the Shannon Road-Rillito Creek/El Camino del Cerro WQARF site was completed in March 2014. The 60-day public comment period on the document occurred from March 19 to May 17, 2014. A public meeting was held on May 8, 2014, to present the findings of the Remedial Investigation to the public and respond to verbal comments on the document. A response to comments document is being drafted, and the Final Remedial Investigation report is being prepared. ADEQ is planning further investigations to fill known gaps in the Remedial Investigation data during the upcoming Feasibility Study.
- The RI Report was finalized in April. ADEQ's contractor conducted a data gap investigation including depth-specific groundwater sampling and developed an evaluation of remedial alternatives in preparation for the conducting the FS.
- The Final FS was issued in July. Operation of the South Shannon Well wellhead treatment system and regular groundwater monitoring continue.

Appendix B – Targeted Communities

A. Neighborhood Associations

The following presents the registered neighborhood associations and their respective points of contact in the Shannon Road-Rillito Creek/El Camino del Cerro Water Quality Assurance Revolving Fund (WQARF) site community involvement area:¹

Flowing Wells Neighborhood Association

Kevin Daily, President

Phone number not provided kevindcdaily@yahoo.com

Meadowbrook Neighborhood Association

Julie Hoover, Community Manager

(520) 219-7200 jhoover@aamaz.com

B. Community Schools

The Shannon Road-Rillito Creek/El Camino del Cerro WQARF site community involvement area includes the Flowing Wells School District. The following list presents the community schools in the Shannon Road-Rillito Creek/El Camino del Cerro WQARF site community involvement area:

Carden of Tucson, Inc.

5260 North Roya	l Palm Drive,	Tucson	, AZ 85705
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(520) 293-6661

Flowing Wells Unified School District

1556 West Prince Road, Tucson, AZ 85705

(520) 696-8800

Green Field Country Day School

6000 North Camino De La Tierra, Tucson, AZ 85741

(520) 297-2288

Laguna Elementary School

5001 North Shannon Road, Tucson, AZ 85705

(520) 696-8450

San Joaquin Alternative School

5940 North San Joaquin Avenue, Tucson, AZ 85741

(520) 696-3720

Sonoran Science Academy

2325 West Sunset Road, Tucson, AZ 85741

(520) 665-3400

¹ The City of Tucson Neighborhood Associations website did not provide address information for each respective neighborhood association president.



C. Vulnerable Population Centers

No vulnerable population centers, such as child care and assisted living facilities, were identified in the Shannon Road-Rillito Creek/El Camino del Cerro WQARF site community involvement area.

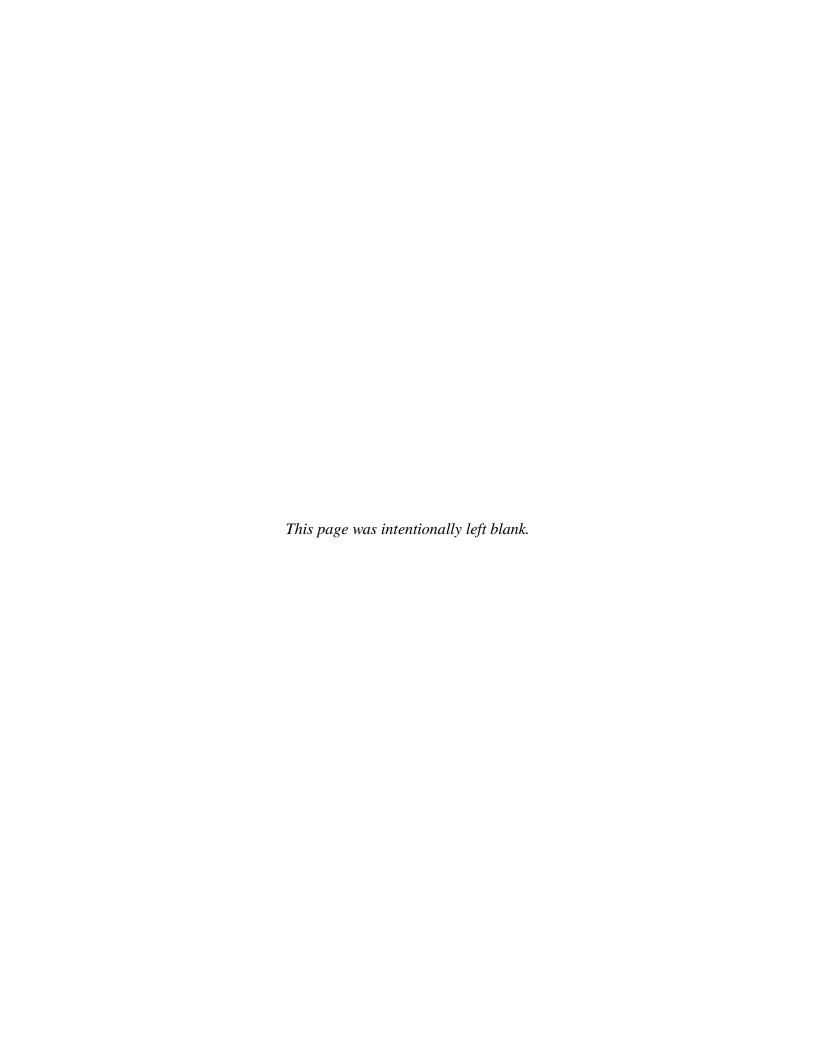


Appendix C – Local and State Elected Officials

As of the publication of this community involvement plan, the community involvement area for the Shannon Road-Rillito Creek/El Camino del Cerro Water Quality Assurance Revolving Fund site falls under City of Tucson Ward 3; Pima County Supervisorial Districts 1 and 3; and Arizona Legislature Districts 9 and 11.

CITY Officials	COUNTY Supervisors	STATE Representatives	STATE Senators
City Hall 255 W. Alameda St. 10 th Floor Tucson, AZ 85701 (520) 791-4213	Pima County 130 W. Congress St. 11 th Floor Tucson, AZ 85701 (520) 724-8126	Arizona House of Representatives Capitol Complex 1700 W. Washington St. Phoenix, AZ 85007 (602) 926-4221	Arizona State Senate Capitol Complex 1700 W. Washington St. Phoenix, AZ 85007 (602) 926-3559
Mayor City of Tucson Jonathan Rothschild	County Supervisor District 1 Ally Miller	Representative District 9 Victoria Steele	Senator District 9 Steve Farley
(520) 791-4201 mayor1@tucsonaz.gov	(520) 724-2738 district1@pima.gov	Room # 324 (602) 926-5683 <u>vsteele@azleg.gov</u>	Room # 213 (602) 926-3022 sfarley@azleg.gov
Interim City Manager City of Tucson Martha Durkin	County Supervisor District 3 Sharon Bronson	Representative District 9 Randall Friese	Senator District 11 Steven Smith
(520) 791-4204 citymanager@tucsonaz.gov	(520) 724-8051 <u>district3@pima.gov</u>	Room # 325 (602) 926-3138 rfriese@azleg.gov	Room # 303 (602) 926-5685 ssmith@azleg.gov
Tucson City Council Member Ward 3 Karin Uhlich		Representative District 11 Mark Finchem	
(520) 791-4711 ward3@tucsonaz.gov		Room # 337 (602) 926-3122 <u>mfinchem@azleg.gov</u>	
		Representative District 11 Vince Leach	
		Room # 342 (602) 926-3106 <u>vleach@azleg.gov</u>	

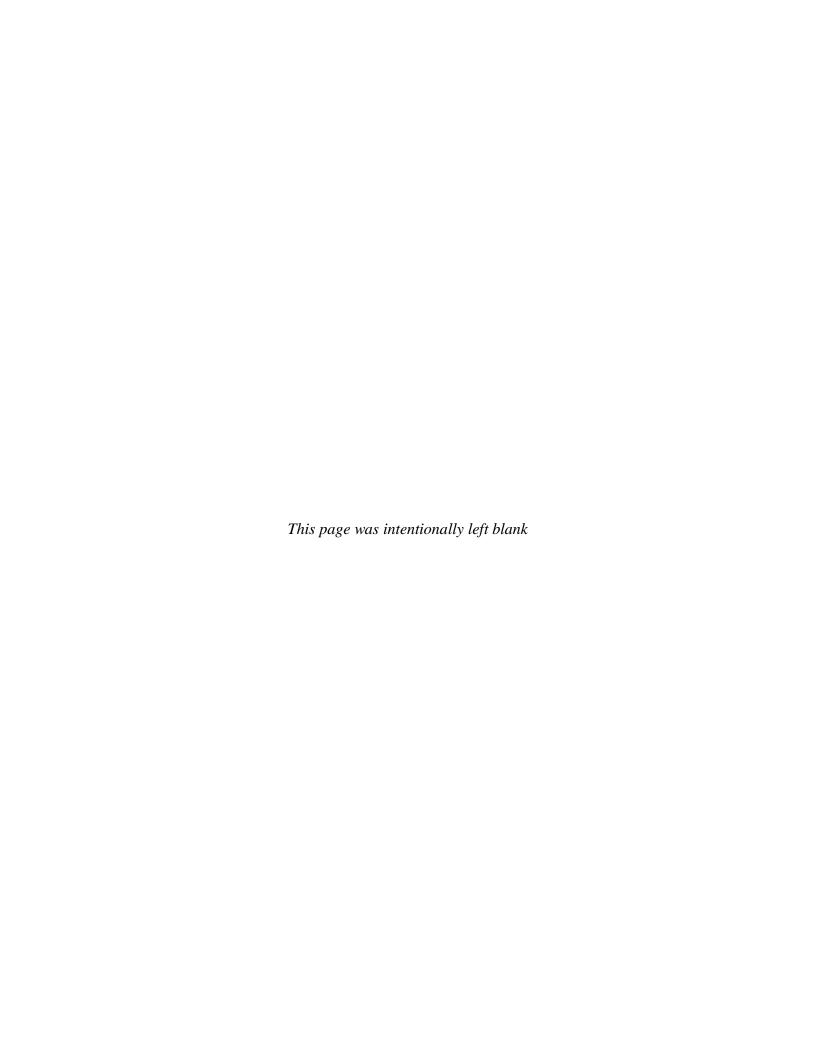




Appendix D – Community Advisory Board Members

The following table presents a list of the Shannon Road-Rillito Creek/El Camino del Cerro Water Quality Assurance Revolving Fund (WQARF) site Community Advisory Board (CAB) members as of June 2018.

Shannon Road-Rillito Creek/El Camino del Cerro WQARF Site CAB Co-Chairs					
		Martin (Marty) Drozdoff (520) 955-1535 martyrepresentsyou@msn.com			
CAB Members					
Robert (Keith) Adkins (520) 869-5439 kawrite@gmail.com	Gary Bu (520) 57 gburchard@me	5-8100			
Bob Ornelas (520) 791-4891 rbtornelas@comcast.net	Albert (Al) (520) 88 lmsk8ny@	7-1010	Kerry Xhaferi (520) 293-8280 kxhaferi@comscast.net		



Appendix E – Media Outlets

The following list presents Tucson media outlets that may be used by the public and Community Advisory Board members to promote information on the Shannon Road-Rillito Creek/El Camino del Cerro Water Quality Assurance Revolving Fund site. The *Daily Territorial* is the external media outlet that the Arizona Department of Environmental Quality will use to publish all public notices related to the site.

A. Newspapers and Magazines

Arizona Daily Star 4850 South Park Avenue, Tucson, AZ 85714	(520) 573-4400
Arizona Daily Wildcat 615 North Park Avenue, Room 101, Tucson, AZ 85721	(520) 621-7579
Biz Tucson 4729 East Sunrise Drive, Suite 505, Tucson, AZ 85718	(520) 299-1005
The Daily Territorial 3280 East Hemisphere Loop, Suite 180, Tucson, AZ 85706	(520) 294-1200
Tucson Citizen ¹	No phone number
Tucson Local Media (Desert Times, The Explorer Newspaper, Foothills News, Inside Tucson Business, Marana News, Tucson Weekly) 7225 North Mona Lisa Road, Suite 125, Tucson AZ 85741	(520) 797-4384
B. Radio	
Arizona Public Media (KUAT, KUAZ [National Public Radio]) P.O. Box 210067, Tucson, AZ 85721	(520) 621-5805
Clear Channel Communications (KMIY, KRQQ, KYWD, KOHT, KNST, KTZR, KXEW) 3202 North Oracle Road, Tucson, AZ 85705	(520) 618-2100
Cumulus Media (KCUB, KHYT, KIIM, KSZR, KTUC)	(520) 887-1000

¹ The *Tucson Citizen* ended its print edition in 2009 and then became an online compendium for blogs until February 2014. The *Tucson Citizen* website (www.tucsoncitizen.com) remains an archive as a community resource.



575 West Roger Road, Tucson, AZ 85705

B. Radio (Continued)

Foundations for Creative Broadcasting (KXCI) 220 South 4 th Avenue, Tucson, AZ 85701	(520) 623-1000
Good News Radio Broadcasting (KCEE, KVOI, KGMS, KLTU, KNXN) 3222 South Richey Avenue, Tucson, AZ 85713	(520) 790-2440
Journal Broadcast Group (KFNN KQTH, KTGV, KMXZ) 7280 East Rosewood Street, Tucson, AZ 8571	(520) 722-5486
Lotus Communications (KTKT, KLPX, KFMA, KCMT) 3871 North Commerce Drive, Tucson, AZ 8570	(520) 407-4500
C. Television	
KFTU-CA Channel 25/46 (Univision) 2301 North Forbes Boulevard, Suite 103, Tucson, AZ 85745	(520) 204-1270
KGUN Channel 9 (ABC) 7280 East Rosewood Street, Tucson, AZ 85710	(520) 722-5486
KHRR Channel 40 (Telemundo) 5151 East Broadway Boulevard, Tucson, AZ 85711	(520) 396-2617
KMSB Channel 11 (FOX) 7831 North Business Park Drive, Tucson, AZ 85743	(520) 744-1313
KOLD Channel 13 (CBS) 7831 North Business Park Drive, Tucson, AZ 85743	(520) 744-1313
KUAS Channel 6/27 (PBS) P.O. Box 210067, Tucson, AZ 85721	(520) 621-5805
KVOA Channel 4 (NBC) P.O. Box 5188, Tucson, AZ 85703	(520) 792-2270



Appendix F – Related Agencies and Contact Information

The following list presents additional resources that may be used by the public and Community Advisory Board members to address concerns or questions related to the Shannon Road-Rillito Creek/El Camino del Cerro Water Quality Assurance Revolving Fund site.

A. State of Arizona

Arizona Department of Agriculture

1688 West Adams Street Phoenix, AZ 85007 Phone: (602) 542-4373

Arizona Department of Health Services

150 North 18th Avenue Phoenix, AZ 85007 Phone: (602) 542-1025

Arizona Department of Water Resources Groundwater Permitting and Wells Section

3550 North Central Avenue Phoenix, AZ 85012 Phone: (602) 771-8527

B. City of Tucson

Housing and Community Development Department

Santa Rita Building 310 North Commerce Park Loop Tucson, AZ 85745 Phone: (520) 791-4171

Recycling Program/Solid Waste

Price Service Park 4004 South Park Avenue, Building 1 Tucson, AZ 85714 Phone: (520) 791-3171

Tucson Water Department

3100 West Alameda Street Tucson, AZ 85701 Phone: (520) 791-4331



C. Other

Agency for Toxic Substances and Disease Registry

Western Branch – Region 9 75 Hawthorne Street, Suite 100, M/S:HHS-1 San Francisco, CA 94105

Phone: (800) 232-4636

Consumer Information Line: (800) 223-0618

Real Estate Seller Disclosures

2910 North 44^{th} Street, Suite 110

Phoenix, AZ 85018 Phone: (602) 771-7799

http://www.aaronline.com/wp-content/uploads/2013/01/seller-property-disclosure-statement.pdf



Acronyms and Glossary of Terms

1,1-Dichloroethane (**1,1-DCA**): A colorless, oily liquid with a sweet odor. Typically, it is an intermediate product in the manufacture of 1,1,1-trichloroethane (1,1,1-TCA), and to a lesser extent vinyl chloride and high vacuum rubber. In the past it was used as a surgical anesthetic. It evaporates easily at room temperature and burns easily. It does not occur naturally in the environment.

1,1-Dichloroethene (**1,1-DCE**): A colorless liquid with a sharp odor that is used to make certain plastics, packaging materials, and flame retardant coatings. Typically, it is a degradation product of other chlorinated solvents.

Aquifer: An underground rock formation composed of such materials as sand, soil, or gravel that can store groundwater and supply it to wells and springs. In aquifers, groundwater occurs in sufficient quantities to be used for drinking water, irrigation, and other purposes.

Aquifer Water Quality Standards (AWQS): State of Arizona maximum levels for contaminants that apply to groundwater in aquifers designated for drinking water use. For example, the AWQS level for tetrachloroethene (PCE) is 5 micrograms per liter (μ g/L).

Arizona Administrative Code (**A.A.C.**): The A.A.C. is where the official rules of the State of Arizona are published. The *Code* is the official compilation of rules that govern state agencies, boards, and commissions.

Arizona Department of Environmental Quality (ADEQ): ADEQ is the executive agency of the Arizona State Government mandated to enforce and administer the State's environmental laws and regulations.

Arizona Revised Statutes (A.R.S.): State laws adopted by the Arizona State Legislature.

Benzene: A colorless and highly flammable liquid with a sweet smell that is an important component of gasoline.

cis-1,2-Dichloroethene (cis-1,2-DCE): An odorless organic liquid that has two slightly different forms, a "cis" form and a "trans" form. Both the cis and trans forms (typically as a mixture) are used as a solvent for waxes and resins; in the extraction of rubber; as a refrigerant; in the manufacture of pharmaceuticals and artificial pearls; in the extraction of oils and fats from fish and meat; and in making other organics.

Cleanup: Actions taken that deal with a release or threat of a release of hazardous substances that could adversely affect public health and/or the environment. The word "cleanup" is sometimes used interchangeably with the terms remedial action, removal action, response action, remedy, remediation, or corrective action.



Community Advisory Board (CAB): A diverse group of community members interested in or affected by the presence of a WQARF site. By statute, ADEQ is required to form a CAB for each WQARF Registry site where ADEQ is initiating a Remedial Investigation. ADEQ seeks the CAB's input in the decision-making process and works with them from the onset of the Remedial Investigation/Feasibility Study process until the requirements of the Record of Decision have been fulfilled.

Community Involvement Area: The mailing area of residences and businesses used in the notification for public meetings and other written notices regarding a site.

Community Involvement Coordinator: The ADEQ employee responsible for ensuring that all statutes and rules related to the involvement of the public and public outreach at WQARF sites are upheld and complied with by ADEQ. Community Involvement Coordinators manage and coordinate the work of CABs for WQARF sites.

Community Involvement Plan (CIP): A document that identifies techniques used by ADEQ and the U.S. Environmental Protection Agency to communicate effectively with the public during the cleanup process at a specific site. The CIP describes the site history, nature and history of community involvement, and concerns expressed during community interviews. In addition, the plan outlines methodologies and timing for continued interaction between the regulatory agencies and the public at the site.

Contamination: Any hazardous or regulated substance released into the environment.

Contaminant: Any physical, chemical, biological, or radiological substance or matter present in any media at concentrations that may result in adverse effects on air, water, or soil. A harmful or hazardous matter introduced into the environment that is not normally found there, or not naturally occurring

Early Response Action (ERA): Refers to a remedial action performed prior to the final remedy, and often prior to the Remedial Investigation. An ERA addresses current risks to public health, welfare, and the environment; protects or provides a supply of water; addresses sources of contamination; or controls or contains contamination where such actions are expected to reduce the scope or cost of the remedy needed at the site. Also referred to as an Interim Remedial Action.

Feasibility Study (FS): A process to identify a reference remedy and alternative remedies that appear to be capable of achieving the Remedial Objectives for the site. It is often done as part of a two-phase investigation in conjunction with a Remedial Investigation.

Granular Activated Carbon (GAC): Treatment process used to remove dissolved contaminants from water by absorption.

Groundwater: Water located beneath the ground surface in soil pore spaces and in the fractures of geologic formations. A formation of rock or soil is called an aquifer when it can yield a usable quantity of water.



Hazardous Substance: Any material that, because of its quantity, concentration, physical or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment.

Interim Remedial Action (IRA): An interim measure to remove or isolate contamination. This action can be taken at any time during the Superfund/WQARF process and is usually taken to protect people and the environment from high levels of contamination until the final Remedial Action can be taken.

Information Repository: The location where a collection of documents about a specific project is stored. Information on certain WQARF and Superfund sites may be available at ADEQ offices and libraries throughout the state.

Metropolitan Domestic Water Improvement District (Metro Water): A public water provider serving water for consumption and fire protection in the northwest, northeast and southwest metropolitan Tucson area.

Monitoring Wells (Monitor Wells): Wells installed for the purpose of collecting samples such as groundwater and soil gas. Analytical results from samples are used to characterize the extent of contamination, the direction of groundwater flow, and the types and quantities of contaminants present in the groundwater.

Operation and Maintenance (O&M): 1. Activities conducted after a WQARF/Superfund site action is completed to ensure that the action is effective. 2. Actions taken after construction to ensure that facilities constructed to treat wastewater will be properly operated and maintained to achieve normative efficiency levels and prescribed effluent limitations in an optimum manner. 3. Ongoing asbestos management plan in a school or other public building, including regular inspections, various methods of maintaining asbestos in place, and removal when necessary.

Plume: A well-defined area of contamination in groundwater, soil, or the air often used to describe the dispersion of contamination in soil and/or groundwater.

Potentially Responsible Parties (PRPs): Those parties (individuals, corporations) identified by state or federal authorities as potentially liable for cleanup costs at a contaminated site.

Preliminary Investigation (PI): The process of collecting and reviewing available information about a known or suspected hazardous waste site or release.

Proposed Remedial Action Plan (PRAP): A document that reviews the cleanup alternatives presented in the site Feasibility Study and identifies ADEQ's preferred alternative. Selection of a preferred alternative is not a closed-end commitment to use that alternative; rather, it is a way for the agency to indicate, based on experience and expertise, which alternative is the most likely course of action. ADEQ must actively solicit public review of and comment on all the alternatives under consideration.



Public Comment Period: A period during which the public can formally review and comment on various documents and ADEQ actions.

Record of Decision (ROD): A legal document that announces and explains the cleanup methods ADEQ will use at a Superfund/WQARF site. The Record of Decision is based on information and technical analysis generated during the Remedial Investigation and Feasibility Study, and on consideration of comments received during the public comment record for the Proposed Remedial Action Plan.

Remedial Action (RA): Any action taken to investigate, monitor, assess and evaluate the release or threat of release of hazardous substances or contaminants to the environment. It may also refer to the actual "cleanup" of the environment by various removal, treatment, monitored remediation, or corrective actions. The term cleanup is sometimes used interchangeably with the terms remedial action, removal action, response action, remedy, remediation, or corrective action.

Remedial Investigation (RI): Establishes the nature and extent of the contamination and the sources; identifies current and potential impacts to public health, welfare, and the environment; identifies current and reasonable foreseeable uses of land and waters of the state; and obtains and evaluates any information necessary for identification and comparison of alternative Remedial Actions.

Remedial Objective (RO): Established remedial goals for the current and reasonably foreseeable uses of lands and waters of the state that have been or are threatened to be affected by a release of hazardous substance.

Remediation: Cleanup or other methods used to remove or contain a toxic spill or hazardous materials.

Remedy: Cleanup method chosen for a site.

Responsible Party: An individual or company (e.g., an owner, operator, transporter, or generator of hazardous waste) that is responsible for the contamination problems at a Superfund/WQARF site. Whenever possible, responsible parties are required to clean up hazardous waste sites they have contaminated.

Responsiveness Summary: A summary of oral and written comments (and ADEQ responses to those comments) received during the public comment period.

Soil Vapor Extraction (SVE): Soil vapor extraction removes contaminant vapors from below ground for treatment above ground. Soil vapor extraction removes vapors from the soil above the water table by applying a vacuum to pull the vapors out. The method is used for chemicals that evaporate easily, such as those found in solvents and gasoline.



Superfund: The program operated under the legislative authority of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and the Superfund Amendments and Reauthorization Act that funds and carries out solid waste emergency and long-term removal and remedial activities. These activities include establishing the National Priorities List, investigating sites for inclusion on the list, determining their priority, and conducting and/or supervising cleanup and other remedial actions. It provides for the cleanup of hazardous substances released into the environment, regardless of fault. The term Superfund also is used to refer to cleanup programs designed and conducted under CERCLA and its subsequent amendments.

Tetrachloroethene or Tetrachloroethylene or Perchloroethene (PCE): A clear, colorless, liquid with a chloroform or sweet odor and a low boiling point; a solvent used for dry-cleaning; degreasing and drying metals and other solids; dissolving waxes, greases, oils, fats, and gums, and in other industrial applications. PCE is a potential occupational carcinogen. Evaporation of PCE increases as temperature increases.

Trichloroethene or Trichloroethylene (TCE): A colorless liquid used as a solvent, metal degreasing agent, and in other industrial applications.

Vinyl Chloride: A colorless compound used in aerosol spray propellant, furniture and automobile upholstery, wall coverings, housewares, automotive parts, and as a refrigerant. It is a chemical intermediate, not a final product.

Volatile Organic Compounds (VOCs): A large group of carbon-containing compounds that are easily dissolved into water, soil, or the atmosphere and evaporate readily at room temperature. Examples of VOCs include PCE, TCE, benzene, toluene, ethylbenzene, and xylene. These contaminants are typically generated from metal degreasing, printed circuit board cleaning, gasoline, and wood preserving processes.

Water Quality Assurance Revolving Fund (WQARF): Also known as the State Superfund, WQARF is the program and funding used to address hazardous substance releases within the state that are not covered by other specific programs.



